INTERMOUNTAIN STATION
Central Reference File
No. 0.73

FOREST SERVICE - U. S. DEPARTMENT OF AGRICULTURE

PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION
BERKELEY - CALIFORNIA

RESEARCH NOTE

No. 176

March 1961

AN IBM 704 COMPUTER PROGRAM FOR COMPUTING BARTLETT'S TEST OF HOMOGENIETY OF VARIANCE

By
Sharon B. Davidson, Statistical Assistant
and George D. Frazier, Research Forester

A test of homogeniety of variance is necessary before class means can be compared.

Bartlett[1/] has described a method of testing the significance of difference between two or more sample variances. The details necessary for the calculation of a corrected Chi Square relationship are described in Snedecor.[2/]

An IBM 704 computer program has been developed at the Pacific Southwest Forest and Range Experiment Station [3/] using the procedure described by Snedecor. This program computes a corrected Chi Square for "n" samples with either equal or unequal sample sizes.

A copy of the program deck, a sample output listing, operating instructions, and input card format can be obtained by writing to the:

Director
Pacific Southwest Forest and Range Experiment Station
P. O. Box 245
Berkeley 1, California.

1/ M. S. Bartlett, "Supplement to the Journal of the Royal Statistical Society," 4: 137, 1937.

2/ George W. Snedecor, Statistical Methods, 5th Ed.; 2nd printing; The Iowa State College Press, Ames, 1957, pp. 285-289.

3/ The University of California Computer Center provided time on the IBM 704 for compiling and debugging this program.

CENTRAL FILE COPY